

Investment decision making in Japanese venture capital firms

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1. Role of VCists

***Fostering NTBFs**

-VCists have played an important role in fostering the new technology based firms, many of which have become today's large businesses such as Google, Apple and Intel (Florida and Kenney, 1988; Pfirrmann, Wupperfeld and Lerner, 1997).

***Scouts and Coaches**

-VCists play a part in investment selection by acting both as “scouts” able to identify future potentials and as “coaches” who can help realize them (Baum and Silverman, 2003).



2. Investment style of Japanese VCF

***Shift to the early stage and technology based firms**

-In Japan, the investment style of VCFs has changed rapidly since the late 1990s.

-There has been a notable growth in the percentage of investment in the technology based and early stage firms, as well as, in total Japanese VC investment amounts to hit a peak of 279 billion yen in fiscal year 2006.

***Later stage and non high-tech sector-before 1990s-**

-Before the late 1990s, Japanese VCFs mainly had invested in later stage firms which were maturing and prepared to IPO and had not been willing to invest in new startup firms (Hamao, Packer and Ritter, 2000).

-One of the weakness of Japanese innovations system is the low percentage of high tech sector in Japanese VC investment, such as internet, biotechnology and nanotechnology(OECD, 2008)



***Early stage investment -after the late 1990s-**

-In 2011, the percentage of investments amount in seed firms was 4.4, early stage, 28.1, expansion stage and 34.4, later stage 33.1 (Venture Enterprise Center, 2012). Before the late 1990s, more than 50 percent of VC investments in Japan went to later stage firms that had at least 10 years of experience since being set up.

-The percentage of investments in firms during the first 5 years of inauguration was 17.2 percent in 1995, which has increased to more than 60 percent early 2000's, and gradually declined to around 30 percent in 2011 (Ministry of international trade and industry, 1995-1996; Venture Enterprise Center 1997-2012).



***High-tech Investment -after the late 1990s-**

-Up to the latter half of the 1990s, Japan's VCFs had invested in the areas of wholesale/retail/food and beverage industries, other industries, construction industries and financial and insurance industries, all of which are essentially conventional industries (Ministry of international trade and industry, 1995-1996; Venture Enterprise Center 1996-2000).

-In 2011, 31.7 percent of investment amount of Japanese VCF was IT-related, 13.7 percent, biotechnology, medical and healthcare. Thus, the investment in new technical innovation areas held a considerable share (Venture Enterprise Center, 2012).



3. Effect of the Global financial crisis

- 2007-2008 global financial crisis swept across the world triggered by the collapse of Lehman Brothers.
- Japanese VC investment amounts have sharply declined for three consecutive years after hitting a peak of 279 billion yen in fiscal year 2006 (Venture Enterprise Center, 2012).
- The number of IPO in Japan also sharply dropped from 188 in 2006 to 19 in 2009 including 7 VC backed firms (Venture Enterprise Center, 2012). In fiscal 2009, in particular, total investment dipped below 100 billion yen.

Annual investment amount

	amount of investment (bill. yen)	number of recipients
FY2006	279.0	2774
FY2007	193.3	2579
FY2008	136.6	1294
FY2009	87.5	991
FY2010	113.2	915
FY2011	124.0	1017

Source: Venture Enterprise Center (2012)



4. Research Questions

(1)How do Japanese VCFs value their potential portfolio companies?”

(1).1. Sources of information for valuation

-The VCists who invest in the biotechnology based new firms have a potential to “scout” excellent technologies (Baum and Silverman, 2003)

→Japanese VCFs might have been focusing on the technologies of their potential portfolio companies as the primary source of information used when deciding which firms to invest in because of the increase in new technology related investment.

-VCists in the network-based countries are likely to place greater importance on the personal quality of entrepreneurs and information provided by management and their acquaintance as sources of information for valuation(Manigart, Waele, Wright, Robbie, Sapienza and Beekman, 2000).

→Manigart et al. (2000) did not mention specifically of Japanese VCFs but it seems obvious that, according to their definition, Japan can be included as one of the network-based countries.

-Japanese VCFs pay greater attention to the quality of management than other things (Ray and Turpin, 1993; Nishizawa, 1998).



(1).2.Methods used in evaluating potential portfolio companies

-Japanese VCFs rely on the use of book values and recent transaction prices in the sector(Hasegawa, 2004).

-However, these two methods are evaluated to be less advanced when compared to other valuation methods such as the discounted value of free cash flows and capitalized maintainable earning which are widely used by many VCists in the U.S. (Manigart et al., 2000).



(2)How does the global financial crisis affect Japanese VCFs' valuation?

-After the late 1990s, Japanese VCFs have invested in the new technology firms even though they are basically high-potential but high-risk compared to the relatively mature firms that Japanese VCFs mainly invested in before the late 1990s.

→Under the sever management environment due to the global financial crisis, it seems that Japanese VCFs should reconsider the primary source of information and methods used in evaluating potential portfolio companies.

→Need to examine their valuation of potential portfolio companies and whether or not their pre-investment valuation have changed after the global financial crisis based on questionnaire surveys of Japanese VCFs.



5. Methodology

***Survey in 2006**

Date: From late July to mid-August, 2006

Number of sending: 157(VCFs)

-Corporate members of the Japan Venture Capital Association and companies listed on the “Japan Venture Capital Directory in FY2005” published by Venture Enterprise Center in 2006.

Response : 41

Response rate: 26.1%.

-During late August to late September, I contacted non-responding VCFs via phone, fax, and email to remind them of questionnaire response.

***Survey in 2010**

Date: From late January to early February, 2010

Number of sending: 188 (VCFs)

-Corporate members of the Japan Venture Capital Association and companies listed on the “Japan Venture Capital Directory in FY2009” published by Venture Enterprise Center in 2009.

Response: 40

Response rate: 21.2%.



6.1. Primary Source of Information

***Questions**

- VCFs were asked to rate the following items on a scale of 1 (never use) to 5 (always use).
- These items were selected based on the study by Manigart et al.(2000)

***Y2010 survey**

- (2) Interview with entrepreneurs was ranked the highest on average, followed by the (8) Business plan: overall coherence of business plan.

***Y2006 survey**

- (2) Interview with entrepreneurs was also ranked the highest on average, followed by the (1) Curriculum vitae of management in 2006.

***The comparison between in 2010 and in 2006**

- Japanese VCFs have placed more importance on (10) Business plan: balance sheet account (+0.38), (9) Business plan: profit & loss account (+0.24), (8) Business plan: overall coherence of business plan (+0.22).
- They have less focused on (7) Due diligence by accounting/consulting firms (-0.43), (13) Business plan: qualified audit report (-0.37), (3) Interviews with other company personnel (-0.30).



Sources of information for valuation

	Japan			Manger et al. (2000)			
	(A) Y2006	(B) Y2010	(B)-(A)	USA	UK	Belgium/Netherlands	France
(1) Curriculum vitae of management	4.73	4.72	-0.01	4.19	3.91	4.34	4.41
(2) Interviews with entrepreneurs	4.93	4.87	-0.06	4.22	3.65	4.47	4.25
(3) Interviews with other company personnel	4.30	4.00	-0.30	3.74	3.17	4.00	4.25
(4) Sales and marketing information	4.62	4.64	0.02	3.89	3.80	4.24	4.25
(5) Production capacity/technical information	4.59	4.74	0.15	3.71	3.42	3.71	4.19
(6) Own due diligence report	4.30	4.26	-0.04	4.88	4.47	4.61	4.57
(7) Due diligence by accounting/consulting firms	3.30	2.87	-0.43	3.82	3.75	4.03	4.03
(8) Business plan: overall coherence of business plan	4.63	4.85	0.22	4.19	4.06	4.47	4.77
(9) Business plan: profit & loss account	4.50	4.74	0.24	3.81	4.36	4.48	4.38
(10) Business plan: balance sheet account	4.33	4.71	0.38	3.42	4.00	4.26	4.31
(11) Business plan: unaudited management projections (1 year ahead)	4.65	4.79	0.14	3.40	4.03	4.08	4.57
(12) Business plan: unaudited management projections (more than 1 year ahead)	4.58	4.67	0.09	3.27	3.63	4.03	4.36
(13) Business plan: qualified audit report	3.65	3.28	-0.37	3.41	3.70	4.21	4.44
Average	4.39	4.40	0.01	3.84	3.84	4.23	4.37

***Questions**

-VCFs were asked to rate the following items on a scale of 1 (never use) to 5 (always use).

***Result**

-(1) Capitalized maintainable earning (P/E multiples) was ranked the highest on average, followed by the (7) Investor's special "rule of thumb" pricing ratios in both in 2010 and in 2006.

***The comparison between in 2010 and in 2006**

-The average went down.

-Japanese VCFs have placed more importance on the (6) Dividend yield basis (+1.11).

-They have less focused on (5) Payback period (-1.3), (4) Discounted value of free cash flows (-0.41), (7) Investor's special "rule of thumb" pricing ratios (-0.27), (2) Capitalized maintainable earning (EBIT multiples)(-0.26).



Methods used in evaluating potential portfolio companies

	Japan		(D)-(C)	Manger et al. (2000)			
	(C) Y2006	(D) Y2010		USA	UK	Belgium/ Netherlands	France
(1) Capitalized maintainable earning (P/E multiples)	4.05	3.92	-0.13	3.63	4.31	3.58	3.66
(2) Capitalized maintainable earning (EBIT multiples)	3.34	3.08	-0.26	3.83	3.90	3.76	3.66
(3) Recent transaction prices for acquisitions in the sector	3.19	3.26	0.07	3.78	3.63	3.61	4.22
(4) Discounted value of free cash flows	3.79	3.38	-0.41	3.62	-	3.89	3.26
(5) Payback period	3.73	2.43	-1.30	3.47	-	2.92	4.20
(6) Dividend yield basis	2.12	3.23	1.11	2.14	2.22	3.03	2.29
(7) Investor's special "rule of thumb" pricing ratios	4.00	3.73	-0.27	3.61	2.97	2.97	4.13
Average	3.46	3.29	-0.17	3.44	3.41	3.39	3.63



71. Summary

***Primary source of information**

-Y2010: (2) Interview with entrepreneurs was ranked the highest on average, followed by the (8) Business plan: overall coherence of business plan.

-Y2006: (2) Interview with entrepreneurs was also ranked the highest on average, followed by the (1) Curriculum vitae of management in 2006.

***The comparison between in 2010 and in 2006**

-Japanese VCFs have placed more importance on (10) Business plan: balance sheet account (+0.38), (9) Business plan: profit & loss account (+0.24), (8) Business plan: overall coherence of business plan (+0.22).

***The methods used in evaluating potential portfolio companies**

(1) Capitalized maintainable earning (P/E multiples) was ranked the highest on average, followed by (7) Investor's special "rule of thumb" pricing ratios in both in 2010 and in 2006.

***The comparison between in 2010 and in 2006**

Japanese VCFs have placed more importance on the (6) Dividend yield basis (+1.11).



(1).How do Japanese VCFs value their potential portfolio companies?”

(1).1.Sources of information for valuation

-VCists in the U.S. and U.K. place a greater importance on own due diligence report than any other means for their source of information for potential portfolio companies(Manigart et al., 2000)

→The Japanese VCFs emphasize more on the curriculum vitae of management, and interview with entrepreneurs.

→This finding corresponds to the conclusions of the researches by Ray and Turpin (1993) and Nishizawa (1998)—for Japanese VCFs, the valuating potential portfolio companies equates the selection of management.



(1).2.Methods Used in Evaluating Potential Portfolio Companies

-Relatively high proportion of Japanese VCFs use capitalized maintainable earnings (P/E multiples).

→While Hasegawa (2004) maintained that many VCFs adopt the book value, and recent transaction prices in the sector as their valuation methods, capitalized maintainable earnings (P/E multiples) which is considered to be commonly used in countries with well-developed capital markets (Manigart et al., 2000) is also widely adopted by Japanese VCFs.

→Japanese VCFs have come to attach a greater importance to capitalized maintainable earnings (P/E multiples) in evaluating potential portfolio companies in recent years just as those in the U.S. and U.K.



(2)How does the global financial crisis affect Japanese VCFs' valuation?

- Japanese VCFs have focused on the business plan, especially profit & loss account and balance sheet.
- The percentage of using dividend yield basis has been increased sharply.
- Japanese VCFs have been putting more importance on the dividend and present value of the profit, & loss, balance sheet, not on the future value of potential portfolio companies,
- They are more conservative than before the crisis.



7.2. Discussion

- Japanese VCFs have been investing in the new technology and early stage since the late 1990s, even though investment in the new technology based firms is high-potential but high-risk.
 - The financial crisis negatively affects their investment decision making in terms of the investment in technology based and early stage firms.
- VCists have played an important role in fostering the new technology based firms(Florida and Kenney,1988, Pfirrmann et al., 1997).
 - Japanese VC industry as a whole should recognize their roles or functions that should be.



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